

March 2016 Climate Review for Puerto Rico and U.S. Virgin Islands.

Synopsis: *A generally wet pattern prevailed across the area except across the northern US Virgin Islands where rainfall was below to near normal. Warm to hot temperatures prevailed across the area. Rainfall is likely to be near normal to above normal during Apr-May-June.*

Summary

A generally fair and mainly stable weather pattern prevailed across the local islands throughout most of the period. Trade wind showers and locally induced afternoon showers, however, were observed from time to time across the forecast area. These showers were enhanced sporadically by favorable upper level dynamics associated with passing upper level troughs. Based on the Cooperative Observer Network Data (COOP), 112 % of the normal rainfall was observed across PR. Preliminarily, an average rainfall total of 3.21 inches was measured, which is 0.35 inches above normal (Table 1). Across St. Thomas/St. John and St. Croix, an average rainfall total of 0.82 and 2.47 inches was observed respectively. This is 0.65 inches below normal at St. Thomas/St. John and 0.94 inches above normal at St. Croix (Table 1). In terms of temperature, the mean temperature for PR was 75.5°F, which is approximately 1.2°F warmer than the 30-year average from the National Centers for Environmental Information (NCEI).

At the primary climatological data sites, a rainfall total of 2.39 and 2.43 inches was observed at Henry E. Rohlsen Airport in Saint Croix (TISX) and Cyril E King Airport in St Thomas (TIST) respectively. This is 0.28 and 1.01 inches above the normal rainfall at TISX and TIST, respectively. In terms of temperature, the mean temperature at TISX and TIST was 80.0 and 80.7°F, which is 1.4 and 1.3°F above normal respectively.

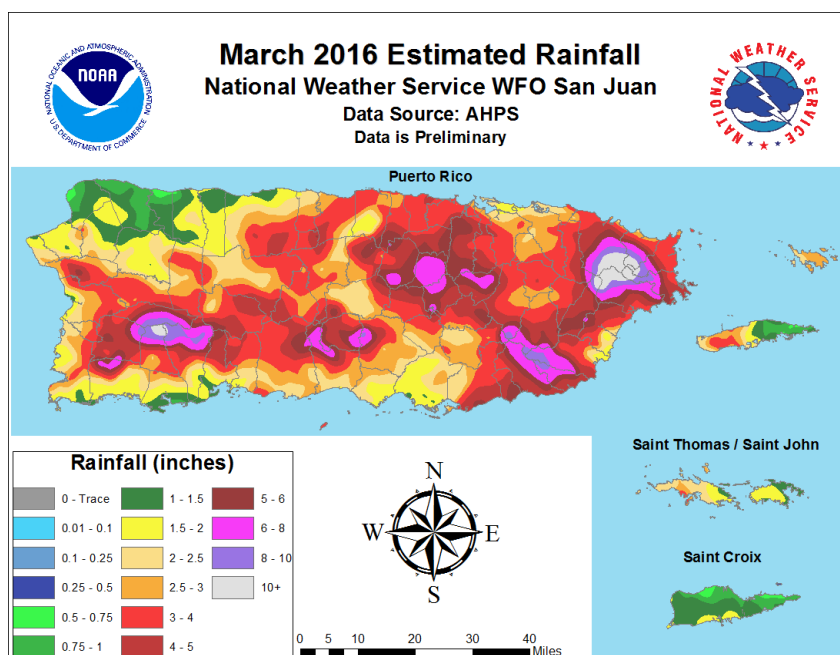
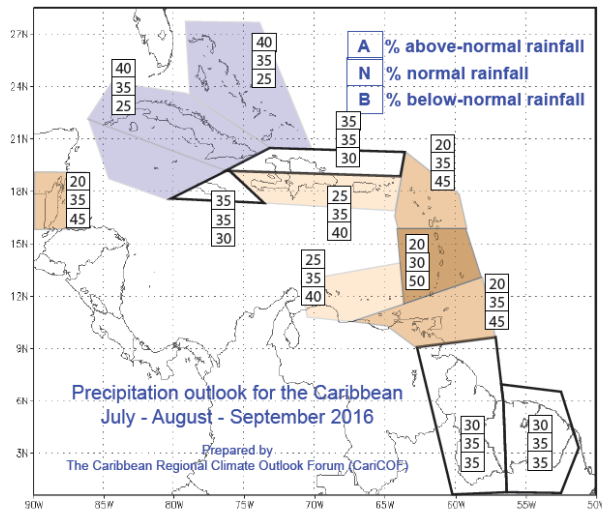
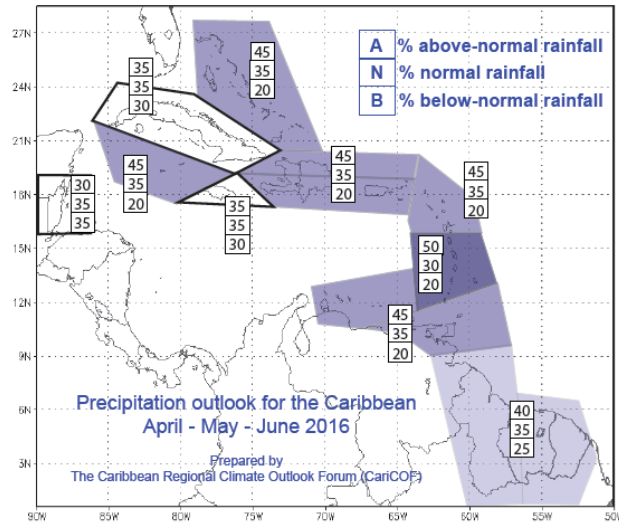


Figure 1. Rainfall Totals based on AHPS

Looking Ahead

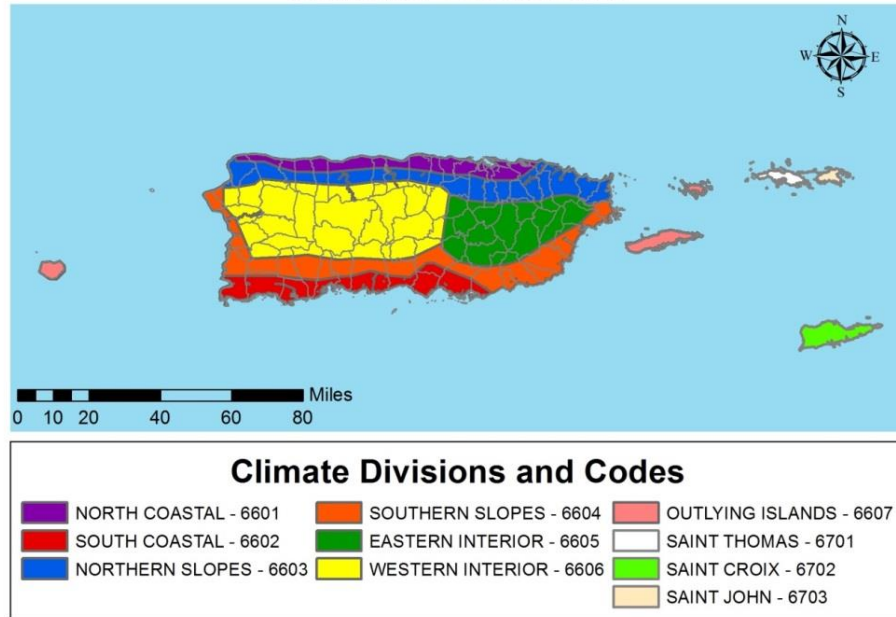
Warm sea surface temperatures north and east of the islands may lead to above average air moisture across the islands for April-May-June. Due to the cooling in the Atlantic around the equator and west of Africa during July-August-September, however, a pattern of drier air may be observed to reach the Eastern Caribbean. Most global models are suggesting a shift to above-normal rainfall for much of the region during April-May-June. By contrast, a shift to below-normal rainfall is expected during July-August-September.



More Info: <http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/>

Average Rainfall Accumulation per climate zones based on COOP

Puerto Rico and U.S. Virgin Islands Climate Divisions



	North Coastal	South Coastal	Northern Slopes	Southern Slopes	Eastern Interior	Western Interior	All PR	St Thomas / St John	St Croix
Observed (March)	2.94	2.16	2.46	2.57	5.23	3.56	3.21	0.82	2.47
Normal (March)	2.87	1.78	3.23	2.28	3.90	3.10	2.86	1.47	1.53
% PON (March)	102	121	76	113	134	115	112	56	161
Accumulated YTD	8.44	6.12	8.29	7.73	13.72	11.44	9.66	3.77	8.17
Normal accumulation YTD	9.89	4.85	10.46	6.14	12.51	8.87	8.79	5.90	5.14
% PON accumulated YTD	85	126	79	126	110	129	110	64	159

Table 1. March 2016 and Year to date (YTD) Rainfall (inches). Percent of Normal (PON).

Historical Rainfall and Temperature

	Puerto Rico		San Juan Area		IST		ISX	
1	2005	0.35	2005	T	2008	0.01	1951	0.17
2	1957	1.10	1951	0.45	1959	0.36	2003	0.29
3	1951	1.13	1924	0.46	1984	0.44	2005	0.39

Table 2. Driest March on record.

	Puerto Rico		San Juan Area		IST		ISX	
1	2012	9.19	1927	9.38	2004	6.23	1985	4.15
2	1972	5.86	2012	9.27	1961	4.37	2012	3.81
3	1963	5.67	1913	7.18	2012	3.95	1972	3.41

Table 3. Wettest March on record.

	Puerto Rico**		San Juan Area		IST		ISX	
1	2010	76.9	1983	82.2	1993	81.8	2010	80.6
2	2007	76.6	1981	80.9	1994	81.7	1983	80.6
3	1983	76.5	2010	80.7	1979	81.3	1973	80.5

Table 4. Warmest March on record.

	Puerto Rico**		San Juan Area		IST		ISX	
1	1940	67.5	1951	73.8	2009	76.5	1951	75.8
2	1943	67.6	1907	74.0	2000	76.5	1982	75.9
3	1941	68.2	1939	74.1	1955	76.6	1955	75.9

Table 5. Coolest March on record.

** Following years are not included : 1956, 1957, 1961, 1967 and 1973**

	Puerto Rico		San Juan Area		IST		ISX	
Temperature	74.3 °F		78.9 °F		79.4 °F		78.6 °F	
Rainfall	2.86"		1.95"		1.42"		1.56"	

Table 6. Normal Values for March

Monthly and Seasonal Highlights for Primary Climatological Data Sites.

	March	Year to Date
San Juan Area	---	6 th warmest start to a year with an avg. temp. of 79.0 °F.
IST	6 th warmest (80.7F) and 9 th wettest (2.43")	7 th warmest start to a year with an avg. temp. of 79.6 °F.
ISX	5 th warmest (80.0F) and 10 th wettest (2.39")	5 th warmest start to a year with an avg. temp. of 79.3 °F.

Table 7. Spring 2016

Additional Highlights Based on COOP Data

Wettest Days

Station	Inches (inches)	Date
HACIENDA CONSTANZA 2W	2.14	3/15/2016
SANTA RITA	1.90	3/5/2016
MARICAO FISH HATCHERY	1.72	3/16/2016

Highest Maximum Temperatures

Station	Temperature (°F)	Date
PONCE 4 E	96	3/14/2016
RIO PIEDRAS EXP STN	93	3/28/2016
TOA BAJA LEVITOWN	92	3/21/2016

Lowest Minimum Temperatures

Station	Temperature (°F)	Date
TORO NEGRO FOREST	45	3/18/2016
ADJUNTAS SUBSTN	53	3/18/2016
MARICAO 2 SSW	54	3/9/2016

Data is preliminary and has not undergone final quality control by the National Centers for Environmental Information / NCEI/. Therefore, this data is subject to revision. Report based on data received until XX 2016.

Puerto Rico Climate Record Period: 1940 to 2016

San Juan Metro Area Climate Record Period: 1898 to 2016 (Primary climatological site)

Cyril E. King Airport/St Thomas Climate Record Period: 1953 to 2016 (Primary climatological site)

Henry E. Rohlsen Airport/St Croix Climate Record Period: 1951 to 2016 (Primary climatological site)